

METHOD OF FORMING A THIN FILM FOR A SEMICONDUCTOR DEVICE

ABSTRACT OF THE DISCLOSURE

5 A method of forming conformal, high quality silicon oxide films that
can be deposited over closely spaced, submicron lines and spaces without the
formation of voids, comprises forming a plasma of TEOS and a selected halogen-
containing gas in certain ratios. By proper control of the energy sources that create
the plasma, the proper selection of the halogen-containing gas and selection of other
10 processing parameters, high deposition rates can also be achieved.